

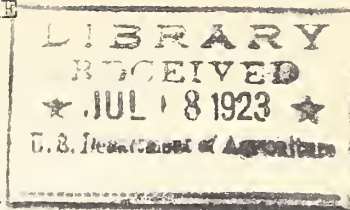
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PREDATORY ANIMAL CONTROL IN WYOMING

SUGGESTIONS FOR DEN-HUNTING GRAY WOLVES.

The gray, or lobo, wolf (*Canis occidentalis*) is undoubtedly the most destructive of all predatory animals native to the Western States, and it is only by a systematic warfare waged upon these wolves each year that their numbers are kept down to an extent which permits profitable stock raising in many communities.

Wolves are particularly sagacious, wily, and hard to capture after maturity, and the result of years of experience shows that the most practical way of bringing them under control in any locality is to capture and kill the pups in the spring soon after they are born, rather than to delay action until they are old enough to leave their dens and scatter over the country. Even this system requires considerable knowledge of the habits of the animals and a thorough familiarity with the country which they infest and the places they use for denning.

A hit-or-miss system of hunting wolf dens is expensive and productive of little or no good results. In fact, it does more harm than good, since when they learn that they are being hunted, the animals become even more wary and cunning. Hunters who are familiar with wolf tracks can distinguish that of the male from that of the female, because the male's track, as a rule, is much larger and more round than the female's. When wolves leave the den in search of food they usually take a meandering course and do a great deal of walking, stopping, and hunting around. Where this is noted these wolves should be back-tracked to the den. On the other hand, if the wolf or wolves (they often travel in pairs, as the male is as much interested in taking food to the pups as is the mother wolf) have obtained their food they usually take a straight course and travel in a trot in returning to the den.

If the old wolves were not killed when the pups were taken or before, the traps that have been set out should be left and more added. One of the best settings after the pups have been scalped is to dig a hole and bury them about four inches under the ground, within 100 feet of the den, and set six or eight traps within a radius of three feet of the buried pups. The old female will almost always go to dig out the pups before leaving that locality, and is very often trapped in this manner. Also, set a couple of traps in the mouth of a wolf den, as frequently old wolves will go into the den within ten days after the pups have been taken to make certain whether their pups are dead. Work of this kind is time well spent, as one or both old wolves are almost always taken.

It is essential to know the character of the country in which the wolves den, the time the pups are born and when they may be found within their dens, and the best time of day to approach the dens in order to find one or both of the old wolves as well as the pups, thus securing a possible chance of



exterminating the whole family. It is always well to make a study of the surroundings of the den when found, noting carefully the different runways and means of escape from the vicinity of the den; the cover that is afforded animals in getting away from the locality, and the open spots through which they are reasonably certain to pass; the direction of prevailing winds; and the character of distant country which will afford the best protection in hiding from the hunter if the animals get away. Particularly should the various approaches to the den be studied, since if extreme caution is used in approaching the den early in the morning, during the time when the pups are from 1 day to 3 weeks old, it is a fairly safe assumption that the she wolf will be within or lying just outside, with a good chance of the dog being close by, especially if he is fairly old. This being the case, one or both may be shot.

If this system is impracticable for any reason, the knowledge of the various runways will give an opportunity to formulate some plan to intercept the animals, or at least so to station men, if there are more than one, that one or more can get shots at the animals as they leave the vicinity of the den when they find they are being molested.

#### Location and Character of Dens.

With few, if any, exceptions, dens will be found on southern exposures and above the general level of the surrounding country. Canyons or deep gulches with rim rock at the top, and sagebrush or aspen on the slopes from the foot of the cliffs to the bottom of the canyon or gulch, appear to be favorite places for denning, especially if the formation be sandstone with holes or caves under the rim which may be enlarged to suit the convenience of the wolf desiring to use them. In many localities tiers or terraces of sandstone ledges occur; these are favorite places, since the snow melts quickly from the ground and rock in front of the den, due to radiation, affording excellent level places for the old wolves to lie and sun themselves and for the pups to play before they are old enough to leave the immediate vicinity of the den.

Caves and holes protected by a light growth of aspen in front of the entrance from the sight of anyone who may come near the locality seem to be favorite dens. If no ledges are available, holes are sometimes dug under the roots of large trees, generally in some small sagebush basin on a south hillside. These holes run underground from 6 to 10 feet, the first four or five feet being straight, with an abrupt turn into a chamber large enough for the old wolf to lie in and turn around. Occasionally it has been found that where wolves have been robbed of their young for several years they have become so wary that the dens were found beneath down timber in heavy spruce stands under 8 feet of snow. Dens are much more easily located and found on the deserts and bad-lands than in the Rocky Mountain regions.

#### Hunting Dens.

When the whelping season arrives a patrol of the foothills should be made, keeping upon high points and ridges along the edge of the first belt of timber; or, if lower down, traveling so as to cut all tracks that may follow up gulches, canyons, or open hillsides. Undoubtedly the proper time is as





early in the morning as possible after a snowfall. If the first morning does not produce results, the second should if there are dens in the locality, since it may be possible that the old wolf may not forage until the second night after a storm. Wolves generally go to the nearest bunches of stock in the valley below the den, make their kill during early morning hours, and return to the den about daylight, or soon after sunrise. In order to trace them effectively, the tracks should be followed before they have had time to melt away in the morning sun, as they do in mild weather.

When the hunter has reached a point on the wolf's trail that he believes from the lay of the country is near the den, he should leave the trail and go to some point of vantage where he can overlook the surrounding country, being careful to keep out of sight, and taking particular pains to keep the wind in his face from the direction in which he believes the den to be located. Careful scanning of the locality through field glasses will probably reveal the den, or possibly one or both of the old wolves. The numerous tracks that will always show leading to and from the den will satisfy the hunter that the wolves are there, and by careful scrutiny he will be able almost instinctively to locate the den even if he sees no sign of life. In high mountain districts wolf tracks crossing snow banks can be seen over a mile by the aid of field glasses. With a little careful study of wolf trails the dens can often be located at that distance.

If the hunter is not afraid that some bounty hunter will steal the pups, right then is the time to locate the main trails and mountain passes emerging from the locality of the den and to make about 20 or 30 trail settings of traps. Traps should be placed in selected places from 1 mile to a quarter of a mile from the den. If any human signs are made within 200 yards of the den the pups should be taken immediately, for, if they are not, the old wolves will move them, making it necessary to relocate them, a task which sometimes is very difficult in rough and rocky districts. Of course, if bounty hunters are in evidence, the only thing that can be done is to try to get the old wolves with a rifle upon approaching the den and to dig the pups out as soon afterward as possible.

Once the den itself is located the method of approach heretofore outlined may be followed with good chances of success. If it is seen that the den is too small for a man to enter, it is advisable to cut a slender green pole and fasten it to a gaff hook (to be described later).

#### Approaching Dens.

Approach the den quietly and one or more of the pups are likely to be caught before they run to the far end of the hole. In case they do this and do not return of their own accord, they may nearly always be coaxed within reach by imitating the whine of a dog, varying the intensity of the sound as the pups approach or retreat. Care must be taken to keep out of sight, however, and not allow any more of the human scent to penetrate the den than is unavoidable, for even young pups have an instinctive fear of the human scent and retreat from it in all cases. Complete silence while keeping a careful watch of the hole within easy reach may also produce results. If one method fails, the other should be tried. If it becomes necessary to crawl into the den to get the pups, first determine absolutely whether or not the old wolf is within.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry, no matter how small, should be carefully documented to ensure the integrity of the financial data. This section also outlines the procedures for reconciling accounts and identifying any discrepancies that may arise.

The second part of the document provides a detailed overview of the company's current financial position. It includes a summary of the balance sheet, income statement, and cash flow statement. The analysis highlights the company's strong performance in the first quarter, particularly in terms of revenue growth and cost management. However, it also notes areas where further improvement is needed, such as reducing overhead expenses and improving the efficiency of the supply chain.

The third part of the document discusses the company's strategic goals for the upcoming year. It outlines a plan to expand into new markets, develop new products, and improve operational efficiency. The document also addresses the challenges the company may face in achieving these goals, such as increased competition and fluctuating market conditions. Finally, it provides a timeline for the implementation of the strategic plan and identifies the key performance indicators that will be used to measure success.

The fourth part of the document contains a list of recommendations for the management team. These recommendations are based on the findings of the financial analysis and the strategic plan. They include suggestions for improving financial controls, enhancing communication between departments, and seeking out new opportunities for growth.

The final part of the document is a conclusion that summarizes the key points of the report. It reiterates the importance of maintaining accurate records and following the strategic plan. It also expresses confidence in the company's ability to achieve its goals and improve its financial performance in the coming year. The document ends with a statement of appreciation for the management team's efforts and a commitment to ongoing communication and collaboration.



Usually, if a wolf is in the den and has any intention of coming out she will do so immediately upon the approach of man. If she decides to stay, there is little or no danger in crawling into the den and killing her. Many old wolves have been taken out of the dens alive without any difficulty, as they will not fight while in a dark hole - but look out for them when they reach daylight. If the mother wolf is not within the den, little attention need be paid to her until the pups are all out, when her capture can as a rule be accomplished, especially if she is an old wolf, by the following method:

In each litter there is usually a runt which, though small in size, is exceptionally large in lung capacity. When captured, he, together with the other pups, should be taken to a point near the den where there is a clear range for sound to travel, but screened from sight. Take the runt and the other pups, if necessary, and pinch them, twist their ears, tail, or anything that may be necessary to make them whine, yelp, and cry. The louder the better. This may induce the rest of the pups to cry, the more of it the better. Unless seriously alarmed, the old wolf will not be far away. It might be well to say here that if the hunters are not sure of getting her under the first plan, it is better to let her go temporarily without shooting, with the idea of carrying out the plan now being described. She will soon answer the cry of the pups with barks and howls. When this happens, renewed efforts should be made to increase the volume of the pups' cry, and it is reasonably certain that within a very short time the old wolf will come rapidly within shooting distance and possibly she will charge. This has happened to the writer, and will work more times than it will fail.

#### Tools and Accessories Necessary.

The following tools and accessories for getting pups out of dens are essential for good work, and ordinarily are all that are required:

A short-handled shovel; flashlight; and a hook for catching and pulling out the pups; one half dozen No. 14 traps, since much may be accomplished with them at times; a piece of canvas 3 feet square used for a kneeling mat, to flag or mark the entrance to the den if it becomes necessary to seal it up and leave it for a night - a gunny sack, saddle blanket, or piece of clothing will answer the purpose, but the canvas takes up little room and can be used without inconveniencing the hunter in any way; and a few feet of small copper wire to fasten the hook to its handle.

A very satisfactory hook of the following description has been used by the writer for several years: A hay or manure fork tine is shaped and barbed in length like a fish hook, from 4 to 6 inches, the hook being 1 to 2 inches from the curve to the point. This point must be tempered so that it will be neither too soft nor too hard, in order to stand raking along the rocks without being injured materially. It must be filed thin with the point sharp and keen as a needle, and the point of the barb the same. The end of the shank should be turned to have a projection of from half an inch to an inch at right angles to the shank and opposite to the curve of the hook, flattened and filed sharp like a knife blade. This should be driven into the stick which is to be



used as a handle, and in addition the shank should be wired in two places to the handle. This handle should have a certain amount of elasticity as well as strength, and such sticks may, in nearly all cases, be secured in the immediate vicinity of the den. A green birch, elder, aspen, or lodgepole pine of small size may be used, also a dry willow well seasoned and of proper size will answer very well. Its length will depend upon the depth of the hole and the number of turns in it.

Candles can be used, but they are much inferior to an electric flashlight, which costs little; the satisfaction in using the latter will more than warrant the cost, since it gives a powerful light in the den, emits no odor, and will not go out until you want it to. The odor of candles and matches in the dens combined with the wolf smell has a very nauseating effect.

It may sometimes be necessary to use dynamite in order to get the pups, but such cases are rare, and because of its danger this method should not be resorted to unless absolutely necessary.

The uses to which the shovel may be put are obvious and need no explanation.

The successful use of the gaff hook will require some care but a little common sense and experience will soon show the hunter how to obtain the best results and will be of more value than pages of explanation.

The traps may be used in two ways when the den is to be sealed over night. One scheme which often works favorably is to set the traps as advantageously as possible outside the den at points where it is reasonable to assume the old wolf may come. The other, a highly successful scheme, is to set the traps in the den, covering them lightly with the dirt that is there and clogging them. This method is especially valuable when conditions within the den are such that it is impossible to hook one or more of the pups, which often happens, or when it is uncertain whether all of them have been captured. They are sure to come to the mouth of the den during the night, hunting the old wolf, and if reasonable care is taken they will almost invariably get into the traps.

A pit one foot deep immediately inside the den will prove successful in catching pups under three weeks of age, as when they become frantic with hunger they will trail around the mouth of the den and fall into the pit. In all cases the outside of the den should be blocked up with rock or other movable material to prevent the old wolf from taking the pups out.

#### Disposition.

It is scarcely necessary to state that any and all of the animals captured should be disposed of in a manner that will assure their never doing any damage. Killing them immediately is the best plan, but they may be shipped out of the country to museums or parks upon request. They should never pass into the hands of local residents for pets, as there is always a possibility of their regaining their freedom. They are too great a menace to the safety of the livestock industry to allow any chances to be taken, to say nothing of the expense and hardships entailed in the work of exterminating them.





### Precautions.

Do not crowd into a wolf hole unless there is sufficient room to turn around and come out head first. Frequently it is very easy to enter a den which is very narrow, but when returning backwards the clothing catches on the rocks, making it very difficult to get out. Also in trying to get out this way considerable dirt is stirred up, which makes it very disagreeable and often results in choking.

Do not use matches in a deep hole; the fumes from the match combined with the bad air in such places may cause violent sickness, and possibly asphyxiation. Be sure that all avenues of egress are securely stopped up, except the one that is being used to work from. Do not shoot while you are in a deep den unless your ears are plugged with cotton.

In case you are bitten by a wolf, cleanse the wound thoroughly with some strong antiseptic wash and go to a doctor as soon as possible. A wolf bite may be fully as dangerous as that of a rattlesnake.

And finally: Do not desist from the work of cleaning out the den until you know positively that you have all the pups that were in it.

### Remarks.

If this work is carried on each spring in a thorough manner in conjunction with trapping, shooting, and poisoning, it will result in the extermination of the wolves in the West within a very few years.

The mating season for wolves is generally during the months of December and January, and the period of gestation is 63 days. The pups may be born any time from the 16th of March to the 30th of April, and any time during April is propitious for hunting dens.

If den hunting is started before April 1, in many cases the old wolves will be scared away from their selected den site before the pups are born, making it much more difficult to locate the new den with only a few recently made trails to work on.

While wolves den one month earlier than coyotes, practically the same methods are employed during May and the first two weeks in June in den-hunting and destroying the dens of both animals.

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Cheyenne, Wyoming.  
June 29, 1923.



